IN THE DRAWINGS

Please replace the informal drawings with the attached formal drawings.

REMARKS

Claims 1, 3 to 9, 15 and 18 were rejected under 35 U.S.C. § 112, second paragraph. Claims 1, 3, 4, 9 and 18 were rejected under 35 U.S.C. § 102(b), and claims 5 to 8 and 15 were rejected under 35 U.S.C. § 103.

Claims 1, 3, 4 and 18 have been amended. New formal drawings have been submitted.

Withdrawal of the rejection is respectfully requested based on the following comments.

Rejection under 35 U.S.C. § 112

Claims 1, 3 to 9, 15 and 18 were rejected under 35 U.S.C. § 112, second paragraph as being indefinite.

Claims 1 and 18 have been amended as suggested by the Examiner. Claims 3 and 4 have been amended to provide proper antecedent basis.

Withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, is respectfully requested.

Rejection under 35 U.S.C. § 102(b)

Claims 1, 3, 4, 9 and 18 were rejected under 35 U.S.C. § 102(b) as being anticipated by Boston.

Boston discloses a two-stage continuous web cutting system and method where a web 100 is cut partially by a first pair of cylinders 160, 162, and then is fully cut by a second pair of cylinders 164, 166. Web 100 is nipped at the first pair of cylinders 160, 162 not by the cylinders, but by a pair of additional axially located nipping rings 135 (See Fig. 2, and col. 4, line 32 of

Boston). Belts 140 nip the web 100 at the second pair of cylinders 164, 166, which also do not nip the web 100. The reference in Boston at column 4, line 58 to a set of nip rollers 164 is clearly a typographical error, and clearly should read: "The first pair of rotating cylinders 160, 162, each of which moves in opposite direction as the web 100 moves around the cylinders 162, 164 may include a set of nip rollers [164] **168** (Fig. 1) during such movement..." Element 164 is identified everywhere as a cutting cylinder of the second pair of cylinders, and is clearly not part of the first pair of cylinders 160, 162. Nip rollers 168, shown clearly in Fig. 3, are not identified properly in the specification due to this typographical error.

Claim 1 has been amended to recite "a second cutting and nipping device downstream of the first cutting and nipping device for cutting the web between the first cuts so as to form signatures, the second cutting and nipping device having a cutting cylinder with a circumferentially-extending nipping cylinder surface for providing a second nip for the web."

The present invention provides that the second nipping and cutting device nips the web using a circumferentially-extending nipping cylinder surface.

The second pair of cutting cylinders 164, 166 of Boston does not form a nip, as clearly shown by the cylinders 164, 166 being spaced apart in Fig. 3. It is the belts 140 that nip the web 100 in Boston, and there is no teaching or disclosure in Boston that the cylinders 164, 166 have "a circumferentially-extending nipping cylinder surface" as claimed in amended claim 1.

This nipping surface 114 of the present invention is described clearly in the present specification and provides a more accurate nipping of the web during the cutting process.

With respect to claim 3, Boston does not show a nipping cylinder surface at all, and not one that extends from cutting edges.

Claim 18 recites "a cutting cylinder having at least one segmented blade with axially-spaced cutting edges and a nipping surface extending circumferentially with respect to the axially-spaced cutting edges" and "an anvil cylinder having an outer surface providing a nip with

the nipping surface, the anvil cylinder having an anvil surface for contacting the segmented blade of the cutting cylinder."

Neither pair of cylinders 160, 162 nor pair of cylinders 164, 166 of Boston shows a cutting cylinder with "a nipping surface extending circumferentially with respect to the axially-spaced cutting edges." As shown in Fig. 3 of Boston, the cutting cylinders 160, 164 are spaced apart from the anvil cylinders 162, 166, respectively. In the first pair of cylinders separate nip rings 135 are used at the axial edges of the cylinders 160, 162, and thus cutting cylinder 160 does not have a nipping surface at all. In the second pair of cylinders the belts 140 nip the web, but there is no nipping by the cylinders 164, 166.

The anvil cylinders of Boston also do not provide a nip as claimed, but rather only provide an anvil surface.

Withdrawal of the rejection to claims 1, 3, 18 and further dependent claims 4 and 9 under 35 U.S.C. § 102(b) is respectfully requested.

Rejection under 35 U.S.C. § 103

Claims 5 to 8 and 15 were rejected under 35 U.S.C. § 103. These claims all depend from amended claim 1, and withdrawal of the rejection is requested for the reasons mentioned above.

With further respect to Sturtz, it is noted that the Sturtz merely shows as prior art a cylinder 26 with a urethane coating for reducing friction of glass fiber to be cut. There is no teaching or motivation to use this teaching in a folder, as recited in claim 1. In addition, with respect to the cutting cylinder, Sturtz actually teaches away from using urethane as a nipping surface, as the invention of Sturtz is directed to using the urethane to hold the blades, while a non-urethane flange 54 provides rolling contact between the cylinders. In Sturtz, the urethane does not provide a nipping surface on a cutting cylinder. Withdrawal of the rejection to claims 5 to 8 and 15 is respectfully requested for this reason as well.

CONCLUSION

It is respectfully requested that the application is now in condition for allowance. In addition, since withdrawn claims 2, 10 to 14, 16 and 17 depend from claim 1, which is respectfully submitted to be allowable, it is respectfully requested that these claims also be allowed.

Respectfully submitted,

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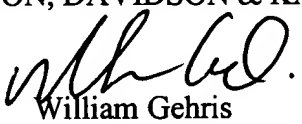
By: 

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ADDENDUM SHOWING CHANGES TO CLAIMS

1. (Twice amended) A folder for a web printing press comprising:

a first cutting and nipping device for partially cutting a web so as to form first cuts in the web, the first cutting and nipping device [nipping] providing a first nip for the web; and

a second cutting and nipping device downstream of the first cutting and nipping device for cutting the web between the first cuts so as to form signatures, the second cutting and nipping device [nipping the web] having a cutting cylinder with a circumferentially-extending nipping cylinder surface for providing a second nip for the web.

3. (Twice amended) The folder as recited in claim 1 wherein the [second cutting and nipping device includes a] cutting cylinder [having] has at least one segmented cutting element with cutting edges spaced apart axially [and having a] , the nipping cylinder surface extending circumferentially with respect to the cutting edges.

4. (Once Amended) The folder as recited in claim 3 wherein the second cutting and nipping device includes an anvil cylinder forming a nip with the nipping cylinder surface [elements] and an anvil for the segmented cutting element.

18. (Twice amended) A cutting device comprising:

a cutting cylinder having at least one segmented blade with axially-spaced cutting edges and a nipping surface extending circumferentially with respect to the axially-spaced cutting edges; and

an anvil cylinder having an outer surface [for] providing a nip with the nipping surface, the anvil cylinder having an anvil surface for contacting the segmented blade of the cutting cylinder.